Listing of the Claims

1. (**currently amended**) A method of manufacturing an optical waveguide preform, comprising:

forming a preform including a first portion having a glass barrier layer,

~~and~~ forming a second portion on the glass barrier layer, the second portion including a dopant therein, and ~~wherein the first portion exhibits a density greater than the second portion; and~~

stripping nearly all the dopant from at least a section of the second portion during sintering thereby forming a moat wherein a refractive index of the section is greater than the moat.

2. (**original**) The method of claim 1 wherein the dopant stripped from the section originated from dopant migration in a previous step.

3. (**original**) The method of claim 1 wherein the dopant in the second portion comprises fluorine.

4. (**original**) The method of claim 3 wherein the dopant in the second portion comprises an average weight percent of at least 0.3% fluorine substantially throughout the second portion prior to the step of stripping.

5. (**original**) The method of claim 4 wherein the step of stripping is accomplished by a stripping agent.

6. **(original)** The method of claim 5 wherein the stripping agent comprises a compound including an element selected from a group consisting of VA and VIA in the periodic table of elements.

7. **(original)** The method of claim 6 wherein the stripping agent is selected from a group including phosphorous oxychloride, phosphorous trichloride, sulfur oxychloride, antimony, arsenic, chlorides and oxychlorides.

8. **(original)** The method of claim 7 wherein the step of forming the preform body includes doping the first portion with germanium.

9. **(original)** The method of claim 8, further including:

applying heat to the first portion prior to forming the second portion, thereby causing at least a portion of the first portion to have a greater density than the second portion.

10. **(original)** The method of claim 9 wherein the heat applying step includes heating the first portion with a flame generated utilizing at least one fuel selected from a group including oxygen, methane and oxygen, carbon monoxide and oxygen, deuterium, and hydrogen.

11. **(original)** The method of claim 9 wherein the heat applying step includes heating the first portion with a CO_2 laser.

12. **(original)** The method of claim 9 wherein the heat applying step includes heating the first portion with a plasma torch.

13. **(original)** The method of claim 9 wherein the heat applying step is accomplished within the range of from about 1500°C to about 1700°C.

14. **(canceled)**

15. **(original)** The method of claim 9 further including:

drying the first and second portions with a drying agent.

16. **(previously presented)** The method of claim 15 wherein the drying step includes selecting the drying agent from a group including chlorine, germanium chloride, germanium tetrachloride, silicon tetrachloride, and combinations thereof.

17. **(original)** The method of claim 15 further including:

partially sintering the first and second portions prior to the stripping step.

18. **(original)** The method of claim 1 wherein the step of stripping is accomplished by a stripping agent that includes an element selected from a group consisting of VA and VIA in the periodic table of elements.

19. **(original)** The method of claim 1, wherein the step of forming the preform body includes doping the first portion with germanium.

20. **(original)** The method of claim 1, further including:

applying heat to the first portion prior to forming the second portion, thereby causing at least a portion of the first portion to have a greater density than the second portion.

21. (**currently amended**) The method of claim 20, wherein the heat applying step includes forming ~~a glass barrier~~ the glass barrier layer between the first portion and the second portion.

22. (**original**) The method of claim 21, further including:

drying the first and second portions with a drying agent.

23. (**original**) The method of claim 22, further including:

partially sintering the first and second portions prior to the stripping step.

24. (**canceled**)

25. (**original**) The method of claim 1 wherein the step of stripping includes stripping substantially all migrated dopant from an outer section of the second portion.

26. (**currently amended**) A method of manufacturing an optical fiber preform, comprising:

forming a preform including a moat having a refractive index less than cladding and radial portion abutting the moat, wherein the moat and the radial portion include a fluorine dopant;

at least partially sintering the moat; and

stripping substantially all the fluorine dopant from the radial portion such that a refractive index of the radial portion is greater than that of the moat.

27. **(original)** The method of claim 26 wherein the step of stripping is accomplished by a stripping agent.

28. **(original)** The method of claim 27 wherein the stripping agent comprises a compound including an element selected from a group including VA and VIA in the periodic table of elements.

29. **(original)** The method of claim 28 wherein the stripping agent includes selecting the stripping agent from a group including phosphorous oxychloride, phosphorous trichloride, sulfur oxychloride, antimony, arsenic, chlorides and oxychlorides.

30. **(original)** The method of claim 29 wherein the preform forming step includes forming the preform to include a core region surrounded by the moat.

31. **(original)** The method of claim 30, further including:

applying heat to the core region prior to forming the moat, thereby causing the core region to have at least a portion exhibiting a greater density than the moat.

32. **(original)** The method of claim 31 wherein the heat applying step includes heating the core region with a flame generated utilizing at least one fuel selected from a group including oxygen, methane and oxygen, carbon monoxide and oxygen, deuterium, and hydrogen.

33. **(original)** The method of claim 31 wherein the heat applying step includes heating the core region with a CO_2 laser.

34. **(original)** The method of claim 31 wherein the heat applying step includes heating the core region with a plasma torch.

35. **(original)** The method of claim 31 wherein the heat applying step includes forming a glass barrier between the core region and the moat.

36. **(original)** The method of claim 31, further including:

drying the preform body with a drying agent.

37. **(original)** The method of claim 36 wherein the drying step includes selecting the drying agent from a group including chlorine, germanium chloride, germanium tetrachloride, silicate tetrachloride, and combinations thereof.

38. **(original)** The method of claim 31, further including:

partially sintering the preform prior to the stripping step.

39. **(original)** The method of claim 26 wherein the step of stripping is accomplished by a stripping agent comprising a compound including an element selected from a group including VA and VIA in the periodic table of elements.

40. **(original)** The method of claim 26 wherein the preform body forming step includes forming the preform body to include a core region surrounded by the moat.

41. **(original)** The method of claim 40, further including:

applying heat to the core region prior to forming the moat, thereby causing the core region to have at least a portion exhibiting a greater density than the moat.

42. **(original)** The method of claim 41, further including:

drying the preform body with a drying agent.

43. **(original)** The method of claim 42, further including:

partially sintering the preform body prior to the stripping step.

44. **(original)** The method of claim 26 wherein the dopant in the radial portion is provided as a result of migration of the dopant from the moat.

45. **(currently amended)** A method of manufacturing an optical waveguide preform, comprising:

forming a preform including a first portion and a second portion, the second portion including a fluorine dopant therein, and wherein the first portion exhibits a barrier layer having a density greater than the second portion; and

stripping nearly all the dopant from at least a section of the second portion wherein the step of stripping is accomplished by a stripping agent comprising a compound including an element selected from a group consisting of VA and VIA in the periodic table of elements such that a refractive index of the section is greater than the second portion.